

Recent IBM Patents

The following patents were recently issued by the countries in which the inventions were made.

Canada		
1,091,955	H. L. Jordan	Motion Producing and Transmitting Mechanism
France		
7,630,659	P. Jean, G. Lebizay, and A. Croiser	A Switching Network
7,817,709	G. Dalbousiere and W. D. Draper	Select System for Priority Interface Circuitry
7,818,478	D. Godard and P. Thirion	Method and Device for Training an Adaptive Equalizer by Means of an Unknown Data Signal in a Quadrature Amplitude
7,820,155	D. Ballatore, G. Le Besnerais, J. P. Nuez, and F. De Laporte	Arrangement for Correcting the Voltage Coefficient of Resistance of Integral with a Semiconductor Body
Germany		
1,817,497	H. H. Berger and W. Kappallo	Method for Controlling the Current Anglification of a Lateral Element of Planar Transistors
2,350,371	P. Rudolph, K. Fritsch, R. E. Thome, and H. H. Lampe	Testing Data Processing Apparatus
2,747,304	D. L. Bazlen, D. W. Bock, R. Berger, H. Chilinski, A. Blum, H. R. Geng, J. Hajdu, U. Willie, F. Irro, and S. E. Neuber	Arrangement for Micro Instruction Control
2,855,118	W. Haug, R. Clemen, and J. Gschwendtner	Dynamic Semiconductor Memory Read/Write Access Circuit
United Kingdom		
1,577,916	E. L. Newman	Data Recognition Apparatus
United States		
4,226,281	R. C. Chu	Thermal Conduction Module
4,226,353	S. U. Blaskovic and R. W. Cornell	Forms Feed Tractor
4,226,570	J. J. Holecek, W. B. Plummer, C. R. Schwieters, and M. N. Zell	Blocker for Magnetic Diskette Gripper
4,226,666	H. F. Winters and B. N. Chapman	Etching Method Employing Radiation and Noble Gas Halide
4,226,896	J. W. Coburn and E. Kay	Plasma Method for Forming a Metal Containing Polymer
4,227,149	L. H. Faure and P. B. Hodge	Sensing Probe for Determining Location of Conductive Features
4,227,152	D. N. Godard and P. E. Thirion	Method and Device for Training an Adaptive Equalizer by Means of an Unknown Data Signal in a Quadrature Amplitude Modulation Transmission System
4,227,175	E. L. Newman	Data Recognition Apparatus
4,227,178	C. J. Gergaud, E. Grimanelli, and A. G. Tracol	Decentralized Data Transmission System
4,227,252	D. N. Godard	Method and Device for Acquiring the Initial Phase of the Clock in a Synchronous Data Receiver
4,227,253	W. F. Ehrsam, R. C. Elander, L. L. Hollis, R. E. Lennon, S. M. Matyas, C. H. W. Meyer, J. Oseas, and W. L. Tuchman	Cryptographic Communication Security for Multiple Domain Networks
4,227,283	J. A. Mathewson and H. Pasterchick, Jr.	Integral Hinge Structure
4,227,455	W. B. Pennebaker	Suspension Arrangement for an Oscillating Body
4,227,988	R. K. Galwey and K. K. Kanazawa	Potentiostat for Use with Electrochemical Cells
4,228,322	C. R. Bringol and G. F. Snyder	Decreasing Time Duration of Recorded Speech
4,228,369	N. G. Anantha, R. A. Henle, and J. L. Walsh	Integrated Circuit Interconnection Structure Having Precision Terminating Resistors
4,288,431	D. J. Barclay, C. L. Bird, M. H. Hallett, and D. H. Martin	Electrochromic Display Device
4,228,450	N. G. Anantha and A. W. Chang	Buried High Sheet Resistance Structure for High Density Integrated Circuits with Reach Through Contacts
344 4,228,504	D. O. Lewis and J. W. Reed	Virtual Addressing for I/O Adapters

4,228,520	R. C. Letteney, S. R. Levine, D. T. Shen, and A. Weinberger	High Speed Multiplier Using Carry-Save/Propagate Pipeline with Sparse Carries
4,228,526	H.-T. Lee	Line-Addressable Serial-Parallel-Serial Array
4,229,100	T. Travis	Automatic Copy Recovery
4,229,112	J. O. Schaefer	Random Stuffer Ribbon Cartridge with Improved Ribbon Exit Control
4,229,136	H. A. Panissidi	Programmable Air Pressure Counterbalance System for a Manipulator
4,229,219	E. A. Metz	Inks for Ink Jet Printing
4,229,233	T. A. Hansen, C. Johnson, Jr., and R. R. Wilbarg	Method for Fabricating Non-Reflective Semiconductor Surfaces by Anisotropic Reactive Ion Etching
4,229,247	G. T. Chiu, J. R. Kitcher, G. M. Ozols, and B. N. Zingerman	Glow Discharge Etching Process for Chromium
4,229,669	G. L. Smith	Tight Tolerance Zero Crossing Detector Circuit
4,229,732	A. M. Hartstein and K. E. Petersen	Micromechanical Display Logic and Array
4,229,749	G. L. Fillmore	Ink Drop Compensation Based on Print-Data Blocks
4,229,753	D. L. Bergeron and G. B. Stephens	Voltage Compensation of Temperature Coefficient of Resistance in an Integrated Circuit Resistor
4,229,774	D. M. Janssen, A. J. Radman, Jr., and W. S. Seaward	Self-Adapting Flow Restrictors
4,229,807	M. H. Kryder	Current Controlled Disk Replicator
4,229,818	S. M. Matyas, C. H. W. Meyer, and L. B. Tuckerman III	Method and Apparatus for Enciphering Blocks Which Succeed Short Blocks in a Key-Controlled Block-Cipher Cryptographic System
4,231,085	D. Bazlen, R. Berger, A. Blum, D. W. Bock, H. Chilinski, H. R. Geng, J. Hajdu, F. Irro, and S. Neuber	Arrangement for Micro Instruction Control
4,234,362	J. Riseman	Method for Forming an Insulator Between Layers of Conductive Material
4,234,367	L. W. Herron, R. N. Master, and R. R. Tummala	Method of Making Multilayered Glass-Ceramic Structures Having an Internal Distribution of Copper-Based Conductors
4,234,887	W. B. Vanderslice, Jr.	V-Groove Charge-Coupled Device
4,234,935	K. E. Schreiner	Means for Maintaining the Identification of Defective Minor Loops in a Magnetic Bubble Memory
4,234,955	T. L. Jeremiah and K. F. Pezdirtz	Parity for Computer System Having an Array of External Registers
4,235,283	O. R. Gupta	Multi-Stud Thermal Conduction Module
4,235,494	R. C. Chu, J. J. LaDue, and C. I. Shelkofsky	Data Processor Enclosure with Tambour Door
4,235,496	C. J. Aug and A. P. Reckinger, Jr.	Circuit Board and Card Interconnection System
4,236,179	R. W. Dreyfus and A. J. Landon	Versatile Microsecond Multiple Framing Camera
4,236,205	D. M. Kindseth and G. R. Mitchell	Access-Time Reduction Control Circuit and Process for Digital Storage Devices
4,236,230	D. A. Thompson	Bistable Magnetostrictive Device
4,236,294	N. G. Anantha, H. S. Bhatia, and J. L. Walsh	High Performance Bipolar Device and Method for Making Same
4,236,678	G. C. Sienkiewicz, D. J. McQuade, and H. G. Leonard	Endless Ribbon Cartridge
4,236,709	R. E. Hunt	Cartridge Sheet Feed Attachment
4,236,830	E. S. Schlig	CCD Parallel-Serial and Serial-Parallel Charge Transfer Method and Apparatus
4,236,834	C. H. Hafer and C. V. Wilbur	Electrothermal Printing Apparatus
4,236,946	J. A. Aboaf, J. J. Cuomo, A. Gangulee, and R. J. Kobliska	Amorphous Magnetic Thin Films with Highly Stable Easy Axis
4,237,216	E. R. Sharvinko	Photosensitive Patternable Coating Composition Containing Novolak Type Materials
4,237,458	R. H. Lantz and A. A. Schwartz	Stroke Expansion Apparatus
4,237,522	D. A. Thompson	Chip Package with High Capacitance, Stacked VLSI/Power Sheets Extending Through Slots in Substrate
4,237,533	P. R. Mills, F. A. Luiz, and J. H. Sorg, Jr.	Preventing Initial Program Load Failures
4,237,542	M. Cukier	Programmable Logic Arrays
4,238,275	K. K. Shih	Pyrocatechol-Amine-Water Solution for the Determination of Defects
4,238,278	I. Antipov	Polycrystalline Silicon Oxidation Method for Making Shallow and Deep Isolation Trenches
4,238,312	A. Galicki, C. P. Hayunga, and H. G. Sarkary	Sputtering System for Optimizing Quartz Deposition Uniformity
4,238,528	R. W. Angelo, R. M. Poliak, and J. R. Susko	Polyimide Coating Process and Material
4,238,559	B.-C. Feng and G. C. Feng	Two Layer Resist System
4,238,834	L. S. Yates	Apparatus for Coordinating Real Time Transfer of Data from a Processor to a Magnetic Media Device

4,238,837 J. C. DeLuca and R. J. Gambino
 4,238,841 R. Clemen, J. Gschwendtner, and W. Haug
 4,238,842 F. J. Aichelmann, Jr.
 4,238,853 W. F. Ehram, R. C. Elander, S. M. Matyas, C. H. W. Meyer, R. L. Powers, P. N. Prentice, J. L. Smith, and W. L. Tuchman
 4,238,854 W. F. Ehram, R. C. Elander, S. M. Matyas, C. H. W. Meyer, J. L. Smith, and W. L. Tuchman
 4,239,107 R. G. Boyatt, Jr. and D. J. Steger
 4,239,151 M. A. Enser and N. G. Stalberg
 4,239,584 C.-A. Chang, L. L. Chang, and L. Esaki
 4,239,586 R. A. Ghez, J. B. Gunn, R. Hammer, and J. A. Van Vechten
 4,239,734 T. F. Ciszek
 4,239,789 S. E. Blum, Z. Kovac, and R. J. von Gutfeld
 4,239,810 O. Alameddine, M. Briska, and K. P. Thiel
 4,239,811 B. M. Kemlage
 4,239,967 T. W. Carr, E. A. Corl, and C. G. Majtenyi
 4,239,983 N. P. Edwards and J. M. White
 4,240,007 R. W. Dreyfus, N. A. Penebre, and R. A. McCorkle
 4,240,075 C. R. Bringol
 4,240,714 C. V. Wilbur
 4,240,758 R. G. Acosta
 4,240,845 R. P. Esch, R. M. Folsom, C.-Y. Liu, V. L. Rideout, D. A. Soderman, and G. T. Wenning
 4,241,307 S. J. Hong
 4,241,343 G. J. Fan, R. L. Garwin, J. L. Levine, and J. S. Wilczynski
 4,241,396 G. R. Mitchell, W. G. Kempke, E. R. Jones, M. E. Houdek, and J. G. Ranweiler
 4,241,406 E. T. Kennedy and D. L. Janeway
 4,242,038 H. A. E. Santini and D. P. Wick
 4,242,680 J. R. Beidle, T. N. Criscimagna, and J. C. Greeson, Jr.
 4,242,710 R. D. Hempstead and J. B. Money
 4,242,791 C. T. Horng, H. V. Lillja, and D. K. Seto
 4,243,332 K. Hartmann
 4,243,417 T. F. Ciszek and G. H. Schwuttke
 4,243,435 C. A. Barile, G. R. Goth, J. S. Makris, A. Nagarajan, and R. K. Raheja
 4,243,475 P.-C. Li
 4,243,476 K. Y. Ahn and D. E. Cox
 4,243,866 H. C. Pfeiffer, P. M. Ryan, and E. V. Weber
 4,243,881 D. S. Bethune, J. R. Lankard, M. M. Loy, and P. P. Sorokin
 4,244,048 F. F. Tsui
 4,244,681 L. D. Comerford, J. D. Crow, and J. S. Harper
 4,245,008 J. D. Michaelson, D. A. Nepela, and P. B. P. Phipps
 4,245,150 C. D. Criscoll and J. N. Hobbs, Jr.

Domain Drag Effect Devices
 Dynamic Semiconductor Memory Read/Write Access Circuit
 Laram Memory with Reordered Selection Sequence for Refresh
 Cryptographic Communication Security for Single Domain Networks
 Cryptographic File Security for Single Domain Networks
 Cartridge Assembly Apparatus for Typewriters
 Method and Apparatus for Reducing the Number of Rejected Documents When Reading Bar Codes
 Molecular-Beam Epitaxy System and Method Including Hydrogen Treatment
 Etching of Multiple Holes of Uniform Size
 Method and Apparatus for Forming Silicon Crystalline Bodies
 Maskless Method for Electroless Plating Patterns
 Method of Making Silicon Photovoltaic Cells
 Low Pressure Chemical Vapor Deposition of Silicon Dioxide with Oxygen Enhancement of the Chlorosilane-Nitrous Oxide Reaction
 Trace Water Treatment
 Non-Destructive Charge Transfer Device Differencing Circuit
 Microchannel Ion Gun
 Text Processing and Display System with Means for Rearranging the Spatial Format of a Selectable Section of Displayed Data
 Extended Life Electrochromic Display Cell
 Method and Apparatus for Establishing Tab Settings and Indexing Parameters, and Printouts Representing Same, for a Word Processing System
 Method of Fabricating Random Access Memory Device
 Module Interconnection Testing Scheme
 Display Apparatus
 Tagged Pointer Handling Apparatus
 System and Method for Analyzing Operation of an Ink Jet Head
 Wafer Orienting Apparatus
 Multiple Data Line Shift Gas Panel Assembly
 Thin Film Head Having Negative Magnetostriction
 High Performance Bipolar Transistors Fabricated by Post Emitter Base Implantation Process
 Electrode Guide
 Method for Directional Solidification of Silicon
 Bipolar Transistor Fabrication Process with an Ion Implanted Emitter
 Method for Etching a Phosphorus-Nitrogen-Oxygen Coating
 Modification of Etch Rates by Solid Masking Materials
 Method and Apparatus for Forming a Variable Size Electron Beam
 Time-Resolved Infrared Spectral Photography
 Chip and Wafer Configuration and Testing Method for Large-Scale-Integrated Circuits
 Magnetic Fiber Optic Casting Apparatus
 Corrosion Resistant Magnetic Recording Media
 Power Line Disturbance Detector Circuit

4,245,152	G. A. Flurry and M. P. Smoak	Decoding Method and System for ETAB Bar Code
4,245,165	C. R. Hoffman	Reversible Electrically Variable Active Parameter Trimming Apparatus Utilizing Floating Gate as Control
4,245,225	G. L. Fillmore, A. R. Hoffman, and T. Young	Ink Jet Head
4,245,227	K. A. Krause	Ink Jet Head Having an Outer Wall of Ink Cavity of Piezoelectric Material
4,245,273	I. Feinberg and J. L. Langdon	Package for Mounting and Interconnecting a Plurality of Large Scale Integrated Semiconductor Devices
4,245,308	J. A. Hirschman, R. J. Llewellyn, and A. H. Rogers	Intelligent Data Processing Terminal Having an Interlock System
4,245,320	A. E. Desblache	Method and Device for Measuring the Slope of the Envelope Delay Characteristic of a Transmission Channel and Their Application to an Automatic Equalizer Selection Technique
4,245,324	G. K. Machol and J. L. Cross	Compact Programmable Logic Read Array Having Multiple Outputs
4,245,884	P. Magura and G. U. Merckel	Optical Coupler for Interconnecting Two or More Optical Transmission Lines
4,245,886	J. S. Kolodzey, G. R. Stilwell, Jr., and E. C. Uberbacher	Fiber Optics Light Switch
4,245,916	A. B. Habich and R. E. Hunt	Daisy Wheel Print Element Structured for Use in a Cartridge
4,245,918	D. J. Bowles, D. E. Clancy, C. F. Johnson, and D. M. Neal	Erase Through Tab
4,246,147	P. Bakos, R. E. Darrow, D. L. Rivenburgh, and W. F. Williams	Screenable and Strippable Solder Mask and Use Thereof
4,246,496	L. G. Heller	Voltage-to-Charge Transducer
4,246,536	E. F. Bradley and F. E. Mueller	Electronic Velocity Measurement Device
4,246,548	E. M. Rutz	Coherent Semiconductor Injection Laser Array
4,246,589	C. M. Denny, J. G. Hughes, and D. L. West	Inertial Deflection Field Tilting for Bi-Directional Printing in Ink Jet Printers
4,246,597	A. S. Cole and O. R. Gupta	Air Cooled Multi-Chip Module Having a Heat Conductive Piston Spring Loaded Against the Chips
4,246,637	L. W. Brown, D. R. Chisholm, and J. D. Dixon	Data Processor Input/Output Controller
4,247,210	D. J. Kacmarcik, S. A. Okcuoglu, and J. W. Raider	Ribbon Feed and Lift Mechanism for a Typewriter
4,247,622	A. Aviram	Photodeformable Polymeric Compositions
4,247,781	E. H. Bayer, J. R. Kranik, and W. F. Mueller	Cooled Target Disc for High Current Ion Implantation Method and Apparatus
4,247,794	K. Jooss and R. E. Norwood	Linear Actuator
4,247,853	D. A. Hamilton and P. R. Herrold	Alphanumeric CRT Display System with Means for Storing Positional Data Calculated During an Initial Scan
4,247,894	W. F. Beismann, H. H. Lampe, and W. H. Pohle	Arrangement for Program Interruption
4,247,907	R. C. Durbeck and K. P. Eswaran	Method and Apparatus for Typing Characters and Optically Readable Binary Representations Thereof on Same Page
4,247,912	C. D. Cullum, Jr., G. E. Keefe, M. H. Kryder, and Y.-S. Lin	Magnetic Bubble Domain Chip with Enhanced Propagation Margins
4,248,688	H. M. Gartner, S. I. Petvai, H. G. Sarkary, and R. H. Schnitzel	Ion Milling of Thin Metal Films
4,249,193	J. Balyoz, C. S. Chang, B. C. Fox, J. A. Palmieri, M. Ghafghaichi, T.-S. Jen, and D. B. Mooney	LSI Semiconductor Device and Fabrication Thereof
4,249,217	E. C. Korte and K. C. Rayburn	Separated Sensor Array Abutment
4,249,241	G. F. Aberle, G. J. Balm, V. Berstis, L. E. Gregg, K.-C. Hu, J. G. Ranweiler, W. C. Richardson, T. L. Schardt, and C. T. Watson	Object Access Serialization Apparatus for a Data Processing System
4,249,796	G. T. Sincerbox and J. G. Gordon II	Projection Display Device
4,249,968	J. R. Gardiner, W. A. Pliskin, M. Revitz, and J. F. Shepard	Method of Manufacturing a Metal-Insulator-Semiconductor Utilizing a Multiple Stage Deposition of Polycrystalline Layers
4,249,970	M. Briska and K. P. Thiel	Method of Boron Doping Silicon Bodies
4,250,009	J. J. Cuomo, R. J. Gambino, J. M. Harper, and J. D. Kuptsis	Energetic Particle Beam Deposition System
4,250,529	S. P. Kleczkowski and R. F. Ross	Method and Apparatus for Opening Disk Packs
4,250,810	R. L. Fowler, D. W. Leach, and L. T. Sloan	Centrifugal Clamp on a High Speed Print Drum
4,251,571	P. L. Garbarino, S. R. Makarewicz, and J. F. Shepard	Method for Forming Semiconductor Structure with Improved Isolation Between Two Layers of Polycrystalline Silicon
4,251,722	R. Vautier	Pulse Generator

4,251,728	H. C. Pfeiffer and M. A. Sturans	Compensated Magnetic Deflection Coil for Electron Beam Lithography System
4,251,737	G. J. Gaudenzi	Dottable Active Collector Driver Circuit
4,251,799	C. R. Jih	Optical Character Recognition Using Baseline Information
4,251,820	J. N. Humenik	Solder Glass Bonded Charge Electrode Assembly for Ink Jet Printers
4,251,837	D. L. Janeway III	Three Decision Thresholding Mode Switch and Method for Mode Selection
4,251,841	W. G. Jacobs	Magnetic Head Slider Assembly
4,251,852	M. E. Ecker and L. T. Olson	Integrated Circuit Package
4,251,860	G. R. Mitchell, F. G. Soltis, and R. L. Hoffman	Virtual Addressing Apparatus Employing Separate Data Paths for Segment and Offset Portions of a Virtual Address and Utilizing Only the Offset Portion to Calculate Virtual Address
4,251,871	W. C. Yu	Method and Apparatus for Storing and Reconstructing Chinese-Like Characters
4,251,885	W. C. Dodt and E. P. Lutter	Checking Programmed Controller Operation